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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,804	01/21/2005	Jacobus A Rozendaal	SFM-0001-US	3801
59115	7590	05/27/2008		
BRUNET & CO. LTD. 10712 MELROSE DR. KOMOKA, ON N0L-1R0 CANADA			EXAMINER MCGOWAN, JAMIE LOUISE	
			ART UNIT 3671	PAPER NUMBER
			NOTIFICATION DATE 05/27/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/521,804	Applicant(s) ROZENDAAL ET AL.	
	Examiner JAMIE L. MCGOWAN	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/4/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 51-59 and 68-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 51-59 and 68-80 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 51, 59, 70 and 79 are rejected under 35 U.S.C. 102(a) as being anticipated by Kovach et al. (6,681,868).

Regarding claim 51, Kovach et al. discloses a conservation tillage implement comprising:

- A cultivator frame (14)
- A plurality of individual coulter wheel assemblies (30)
- A mounting means (31,32) corresponding to each individual coulter wheel assembly (30)
- Each coulter wheel assembly (30) individually mounted to the frame (14) using the mounting means (31,32) and laterally spaced apart from adjacent coulter wheel assemblies (30) in order to reduce plugging of crop residue between the coulter wheels

Regarding claim 59, the implement further comprises removable individual field working tools (42).

Regarding claim 70, the apparatus discloses the method.

Regarding claim 79, the implement is able to operate at shallow depths for seedbed preparation.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 51, 52, 59, 68-70, and 72-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, Jr. et al. (6,896,068) in view of Kovach et al. (6,681,868).

Regarding claim 1, Dietrich, Jr. et al. discloses a tillage implement comprising:

- A cultivator frame
- A plurality of individual tillage implements (38)
- A mounting means (66) for each individual tillage assembly (38)
- each tillage assembly (38) individually mounted on the frame using the mounting means (66), and laterally spaced apart from adjacent tillage assemblies in order to reduce plugging of crop residue between the assemblies

While Dietrich, Jr. Et al. discloses the invention as described above, it fails to disclose that the tillage implements could be coulter wheel assemblies. Like Dietrich, Jr. et al., Kovach et al. also discloses a tillage implement. Unlike Dietrich, Jr. et al., Kovach et al. further discloses that coulter wheel assemblies (30) that are aligned with the direction of travel of the implement can be used for tillage operations. Kovach et al. teaches that coulter wheels are useful for low tillage (column 3 lines 17-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the harrow tines of Dietrich, Jr. et al. with the coulter wheels of Kovach et al. for low tillage operations so as to cause less disruption to the soil.

Regarding claim 52, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that each coulter wheel assembly is laterally adjustable.

Regarding claim 59, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that the implement further comprises individual field working tools (60).

Regarding claim 68, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that the apparatus discloses the kit except for a set of instructions; however, the examiner takes OFFICIAL NOTICE that anything that comes disassembled in a kit would also come with a set of instructions for reassembly.

Regarding claim 69, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that a stilt means (46) for increasing the height of the cultivator frame relative to ground level.

Regarding claim 70, the apparatus discloses the method.

Regarding claim 72, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that the frame comprises three or more longitudinally spaced apart transverse cross members.

Regarding claim 73, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that the implement comprises three or more longitudinally spaced apart rows of coulter wheel assemblies.

Regarding claim 74, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that the coulter wheel assemblies are mounted to the transverse cross members.

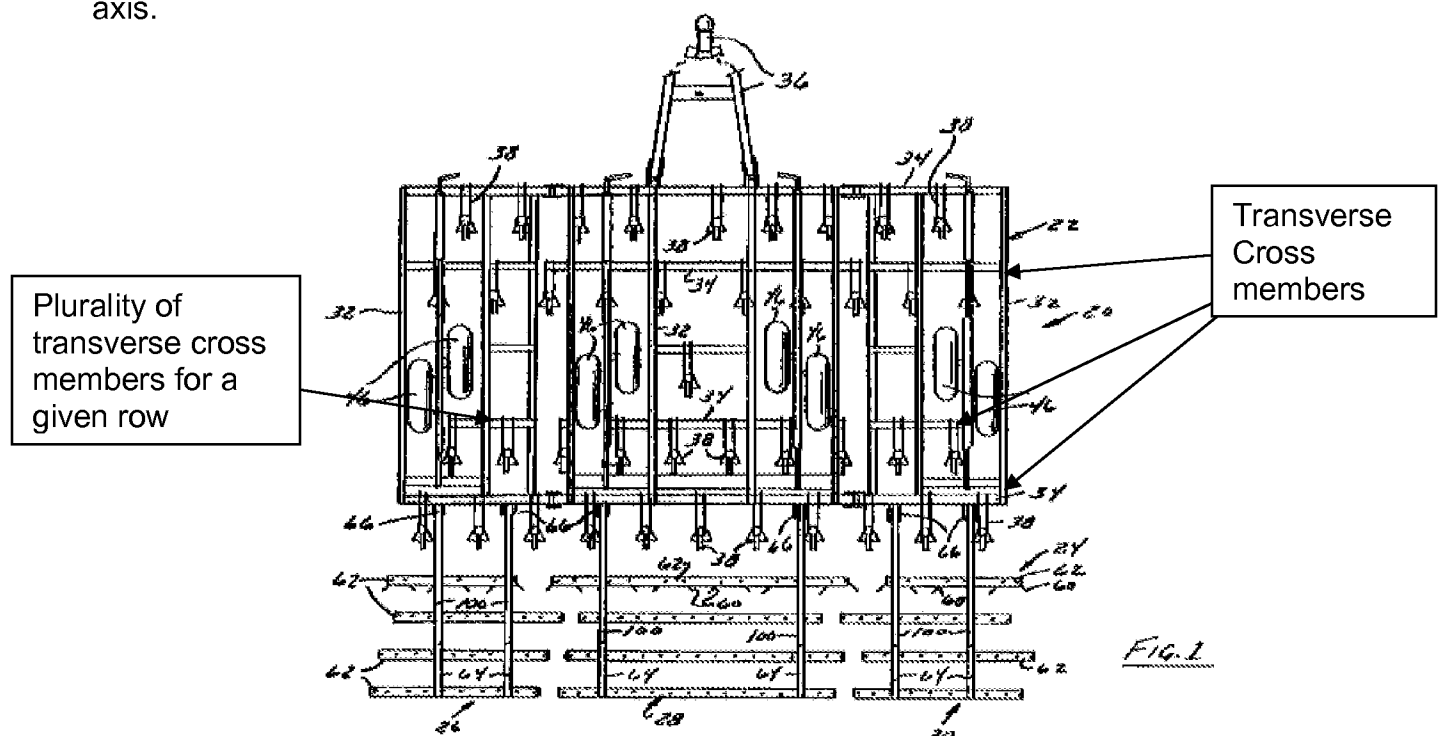
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Regarding claim 75, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that the coulter wheel assemblies in a given row are staggered with respect to the coulter wheel assemblies in a longitudinally adjacent row.

Regarding claim 76, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that the implement further comprises removable individual field working tools and wherein the individual coulter wheel assemblies in a given row are staggered with respect to all coulter wheel assemblies and field working tools in longitudinally adjacent rows of the conservation tillage implement (Dietrich – Figure 1).

Regarding claim 77, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that there is a plurality of transverse cross members for a given row.

Regarding claim 78, the combination of Dietrich, Sr. et al. and Kovach et al. discloses that the plurality of transverse cross members are aligned along a common transverse axis.



Regarding claim 79, the implement is able to operate at shallow depths for seedbed preparation.

5. Claims 53-55, 71 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, Sr. et al. (6,896,068) in view of Kovach et al. (6,681,868) as applied to claims 51 and 70 above and further in view of McIlhargey (6,412,571) (cited by applicant).

Regarding claims 53-55 and 80, the combination of Dietrich and Kovach et al. discloses the invention as described above but fails to disclose a device that allows the coulter wheel assemblies to deflect upwardly about a horizontal axis when it impacts an obstacle. Like the combination of Dietrich, Sr. et al. and Kovach et al., McIlhargey discloses a coulter wheel assembly. Unlike the combination, McIlhargey discloses a device that responds to obstacles by deflecting upwardly. McIlhargey's coulter wheel assembly comprises a spring about which the coulter wheel assembly can deflect when an obstacle is encountered. The coulter wheel assembly rotates upwardly about a horizontal spring axis when an obstacle is encountered. The spring (4) has upper and lower shank ends (2 and 3) extending tangentially therefrom wherein the lower shank (3) deflects upwardly about the horizontal spring axis in response to impact with an obstacle. McIlhargey teaches that this arrangement provides superior shock loading characteristics (column 1 lines 38-39) and maintains more constant ground working conditions (column 2 lines 46-53). Given the teaching of McIlhargey, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the coulter wheel mounting assembly of McIlhargey in the tillage implement of the combination of Dietrich, Sr. et al. and Kovach et al. to provide optimal soil penetration and uniformity and reducing the chance of damage when encountering an obstacle.

6. Claims 56-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich, Sr. et al. (6,896,068) in view of Kovach et al. (6,681,868) as applied to claim 51 above and further in view of Rawson (5,462,124).

Regarding claims 56-58, the combination of Dietrich, Sr. et al. and Kovach et al. discloses the invention as described above but fails to disclose that the coulter wheel assemblies can pivot around a vertical axis. Like the combination, Rawson also discloses a coulter wheel assembly. Unlike the combination, Rawson further discloses that the coulter wheel assemblies can pivot about a vertical axis through the use of a vertically extending hollow strut (42) having a pair of opposed horizontal slots (43) therethrough and a shank with a horizontal hole, wherein the shank (31) is secured within the hollow strut (42) by means of a horizontal pin (44) extending through the slots (43) and the hole, thereby permitting rotational movement of the shank (31) within the hollow strut about the vertical axis (See Figure 5 for pin (44) extending all the way through hollow strut (42) and shank (31)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the pivoting structure of Rawson in the device of the combination of Dietrich, Sr. et al. and McFarlane to allow the coulter wheel assembly to pivot to prevent breakage and avoid damage in the event that an obstacle is encountered while working a field.

Response to Amendment

7. The affidavits under 37 CFR 1.132 filed 03/04/2008 are insufficient to overcome the rejection of claims 51-59 and 68-80 based upon the rejection as set forth in the current Office action because: the showing is not commensurate in scope with the claims. The device described in the affidavits is much more specific than the current independent claims. As they read now, the claims are so broad as to read on a frame with two coulter wheels attached. In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Response to Arguments

8. Applicant's arguments with respect to claims 51-59 and 68-80 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE L. MCGOWAN whose telephone number is (571)272-5064. The examiner can normally be reached on Monday through Friday 8:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on (571)272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas B Will/
Supervisory Patent Examiner
Art Unit 3671

JLM
May 15, 2008